Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040)

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Aerial view of the 200-W-42 excavation



Overview

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford.* There are two major components to this work scope:

- Central Plateau Remediation (CPR) (M. B. Lackey), and
- Reliability Projects (R. G. Slocum).

NOTE: Unless otherwise noted, all information contained herein is as of the end of September 2006.

Top FY 2006 Accomplishments

PBS RL-0040, Nuclear Facility D&D, Remainder of Hanford

Completed 11 of 11 Tri-Party Agreement (TPA) Milestones on or ahead of schedule, 27 for 27 within the contract period

Closure Projects

- Completed downposting of approximately 3,200 acres in the BC Controlled Area
- Gained approval of a tentative agreement for delay of the M-15 Milestones from December 31, 2008 to December 31, 2011
- Completed 216-Z-9 slant high risk borehole and initiated vapor extraction

Remediation Projects

Completed excavation of 200-W-42 pipeline within the U-Zone

D&D Projects

Completed demolition of 100th facility since FY 2004

Reliability Projects:

- Completed Project L-325, A-8 Substation, Phase I, on April 18, 2006
 - Replaced 50-year-old components of the main substation for the Central Plateau of the Hanford Site on April 18, 2006

Notable September Accomplishments

Closure Projects

- Gained tentative agreement for delay of the M-15 Milestones from 2008 to 2011 to allow time for additional waste site characterization prior to submittal of decision documents to the Regulators
- Completed TPA Milestone M-15-45A, Submit Plutonium/Organic Rich OU Remedial Investigation Report, by transmitting the 200-PW-1/3/6 Remedial Investigation Report to RL
- Completed Radiological Surveys of 711 acres in BC Controlled Area

Notable September Accomplishments (continued)

D&D Projects

Completed demolition of five industrial facilities

Remediation Projects

- Waste Site Remediation
 - Completed excavation of 200-W-42 pipe; 1,494 cans (~18 tons each) were transported to Environmental Restoration Disposal Facility (ERDF) (~70% of these cans are associated with lateral spread of contaminants from 200-W-42 vitrified clay pipeline [VCP])
 - Backfilled trenches between U-8 and U-12 cribs and just north of U-8
 - Completed sampling for Phase II excavation. Results for uranium exceed Preliminary Remedial Goal (PRG) limit, for both north and south of 16th Street trenches. Additional analysis required prior to backfilling these trenches
- 221-U Facility
 - Transmitted Decisional Draft 221-U Facility Remedial Design Report/Remedial Action Work Plan to RL
 - Issued canyon demolition study and canyon reactivation study (crane, HVAC, and electrical/ lighting)

Reliability Projects:

- Completed construction on Project L-613, *Re-route Telecommunications Backbone Around 300 Area*, on September 18, 2006
- Achieved a green rating on the DOE-HQ revalidation of government-owned facilities conducted September 26-27, 2006
- Completed construction on Project L-325A, Phase 2, A-7 to A-8 Substation Tie line, on September 29, 2006
- Completed Project L-334, Minimize Potential Environmental Impacts from Export Water System Ruptures, on September 29, 2006
 - Designed and installed remote-operated isolation valves and pressure transmitters on the existing export waterlines between the 1901-Y and 2901-Y Buildings

FY 2006 Funds vs. Actuals (\$M)

		Anticipated FY 2006 Funding (with Carryover)	FY 2006 Actuals	Variance
RL-0040	Nuclear Facility D&D, Remainder of Hanford			
		\$ 68.1	\$ 57.0	\$ 11.2
	Total	\$ 68.1	\$ 57.0	\$ 11.2

FY 2006 Schedule/Cost Performance (\$M)

		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0040	Nuclear Facility D&D, Remainder of Hanford	\$54.1	\$63.0	\$57.0	\$9.0	16.6%	\$6.1	9.7%	\$54.1
	Total	\$54.1	\$63.0	\$57.0	\$9.0	16.6%	\$6.1	9.7%	\$54.1

Numbers are rounded to the nearest \$0.1M.

Schedule Performance (+\$9.0M/+16.6%):

The favorable schedule variance (SV) for Central Plateau Remediation Project (CPR) (+\$3.3M) is due to completion of FY 2005 carryover work scope (\$1.2M), progress on close out of post contract period no-action waste sites (+\$3.0M), and progress on post contract period industrial facility demolition (+\$0.8M). The SV is offset by delays in 200-UW-1 U Plant Zone Waste Site due to delays in Record of Decision (ROD) approval (-\$0.4M); delays in Data Quality Objectives (DQOs) for Model Groups (-\$0.3M), due to not receiving the tentative agreement on M-15 TPA milestones; delays in field work for the Ecological Risk Assessment (-\$0.1M), due to not receiving approval of the Sampling Analysis Plan (SAP) as planned; delays in the 200-CS-1 Feasibility Study/Proposed Plan (FS/PP) Draft B (-\$0.1M), due to resolution of comments; due to completion of Burial Grounds (-\$0.1M) FY 2006 work during FY 2005; due to delays in completing the 200-PW-1 Z-9 Slant Borehole Waste Management and FS (-\$0.2M); and due to delays in procurement of portable decontamination and shower facilities as no vendors have shown interest in bidding (-\$0.3M).

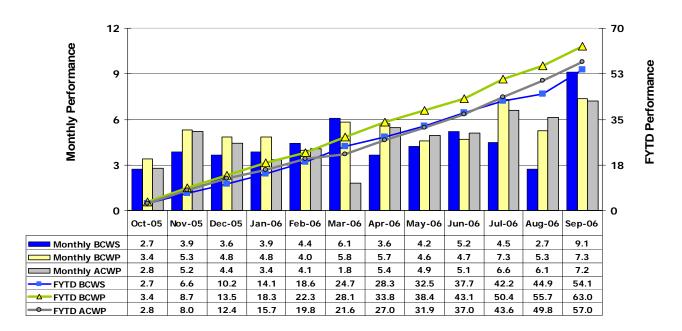
The favorable SV for Reliability Projects (+\$5.7M) is primarily due to progress on prior-year carryover work scope: L-325, *A-8 Substation* (+\$5.0M), L-334, *Minimize Potential Environmental Impact from Export Water System Ruptures* (+\$0.7M), L-304, *Hanford Site Emergency Alerting System* (+\$0.6M), L-580, *Trunking Hanford's Secured Radio System* (+\$0.3M), and the Radio Fire Alarm Replacement project (+\$0.3M), offset by delays in procurement of a non-regulated guzzler and rescue truck replacements (-\$1.0M), and L-598, *Near Term Repairs – Four Repeater Facilities* cultural review delays (-\$0.2M).

Cost Performance (+6.1M/+9.7%):

The favorable cost variance (CV) for CPR (+\$5.2M) is due to efficiencies in the haul road construction (+\$0.6M), offset by Environmental Restoration Disposal Facility (ERDF) and labor cost for W-42 pipeline removal due to contamination spread (-\$3.3M); close out of post contract period no-action waste sites at no cost (+\$3.0M); efficiencies in field work (+\$0.5M); efficiencies in staffing and resources supporting higher priority projects (+\$0.5M); and the variance distribution to RL-40 credited to this project (+\$3.9M).

The favorable CV for Reliability Projects (\$0.8M) is primarily due to favorable bids for L-325A, *A-8 to A-7 Tie line Installation* (+\$1.7M), completion of L-325, *A-8 Substation*, under cost (+\$0.2M), and year-end credit variance distributions and closure services allocations (+\$0.2M), offset by L-334, *Minimize Potential Environmental Impacts from Export Water System Ruptures*, increased cost for Department of Health project report preparation and correction of field conditions (-\$0.3M), and L-573, *Infrastructure Reduction and Consolidation*, increased steel prices (-\$1.0M).

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040		M-91-40L.2.D Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/01/05	11/08/05		Completed ahead of schedule
RL-0040	TRP-04-324	Issue Action Memorandum for U Plant Ancillary Facilities	RL	12/31/05	01/23/04		Completed ahead of schedule
RL-0040	TRP-04-323	Issue Record-of-Decision for Canyon Disposition Initiative	RL	12/31/05	10/03/05		Completed ahead of schedule
RL-0040	TRP-03-260 M-015-46A	200 Area Chemical Lab Waste OUs Remedial Investigation Report.	HQ	02/28/06	02/28/06		Completed on schedule
RL-0040		M-91-40L.3.A Submit Quarterly Burial Ground Vent and substrate Sample	HQ	03/15/06	02/09/06		Completed ahead of schedule
RL-0040	TRP-03-248 M-020-39	Submit 216 S-10 Pond and Ditch Closure Plan to Ecology	HQ	03/31/06	03/30/06		Completed ahead of schedule
RL-0040	TRP-03-245 M-015-39C	Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed RCRA Permit Mod	HQ	03/31/06	03/30/06		Completed ahead of schedule
RL-0040	TRP-04-320	Demolish Ten U Plant Ancillary Facility Structures	RL	03/31/06	09/07/05		Completed ahead of schedule

Milestone Achievement, continued

PBS	MSN	Title	Туре	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	TRP-04-321	Demolish 10 B Plant Structures	RL	03/31/06	09/14/04		Completed ahead of schedule
RL-0040	TRP-03-257 M-020-33	Submit Closure/Post Closure Plans for 216-A-10 Crib, Etc.	HQ	04/30/06	04/27/06		Completed ahead of schedule
RL-0040	TRP-03-263 M-015-44A	200-MW-1 OU Remedial Investigation Report	HQ	04/30/06	04/28/06		Completed ahead of schedule
RL-0040	TRP-03-254 M-015-43C	Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod	HQ	05/31/06	05/31/06		Completed on schedule
RL-0040	WMG-06-006 M-091-40L-010	M-91-40L.3.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	06/15/06	05/31/06		Completed ahead of schedule
RL-0040	WMG-06-007 M-091-40L-011	M-91-40L.3.C Submit Quarterly Burial Ground Vent and substrate Sample	HQ	09/15/06	07/21/06		Completed ahead of schedule
RL-0040	TRP-04-322	Demolish 12 additional B Plant Structures	RL	09/30/06	09/14/04		Completed ahead of schedule
RL-0040	WMG-05-010 M-091-40J	M-91-40J Update 218-W-3A SAP	HQ	45 day before field work begins			On schedule
RL-0040	WMG-05-009 M-091-40I	M-91-40I Update 218-W-4B SAP	HQ	45 day before field work begins			On schedule
RL-0040	D&D Project Performance Objectives	Demolition of five facilities (2707E, 2713E, 2715E, 2719E, & 2722E) to slab on grade.	RL	09/30/06	09/11/06		Completed ahead of schedule
RL-0040	D&D Project Performance Objectives	Remediation of two 200-UW-1 Operable Unite waste sites (200W-42 vitrified clay pipeline/UPR 200-W-163) in the U-Plant Regional Closure Area as identified in the waste site proposed plan	RL	09/30/06	09/30/06		Completed on schedule
RL-0040	D&D Project Performance Objectives	Data Quality Objectives (DQO) and respective Sampling and Analysis Plans (SAPs) for model groups 2-7 that integrate groundwater and source unit needs.	RL	11/30/06		11/30/06	Request for contract adjustment to slip completion date to 11/30/06 was tentatively approved by RL contracting officer on 9/7/06
RL-0040	TRP-06-001 M-015-45A	Submit 200-PW-1 OU Remedial Investigation Report	HQ	10/31/06	09/28/06		Completed ahead of schedule
RL-0040		M-91-40L.3.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/15/06			On schedule